

Appendix S4. Additional richness maps.

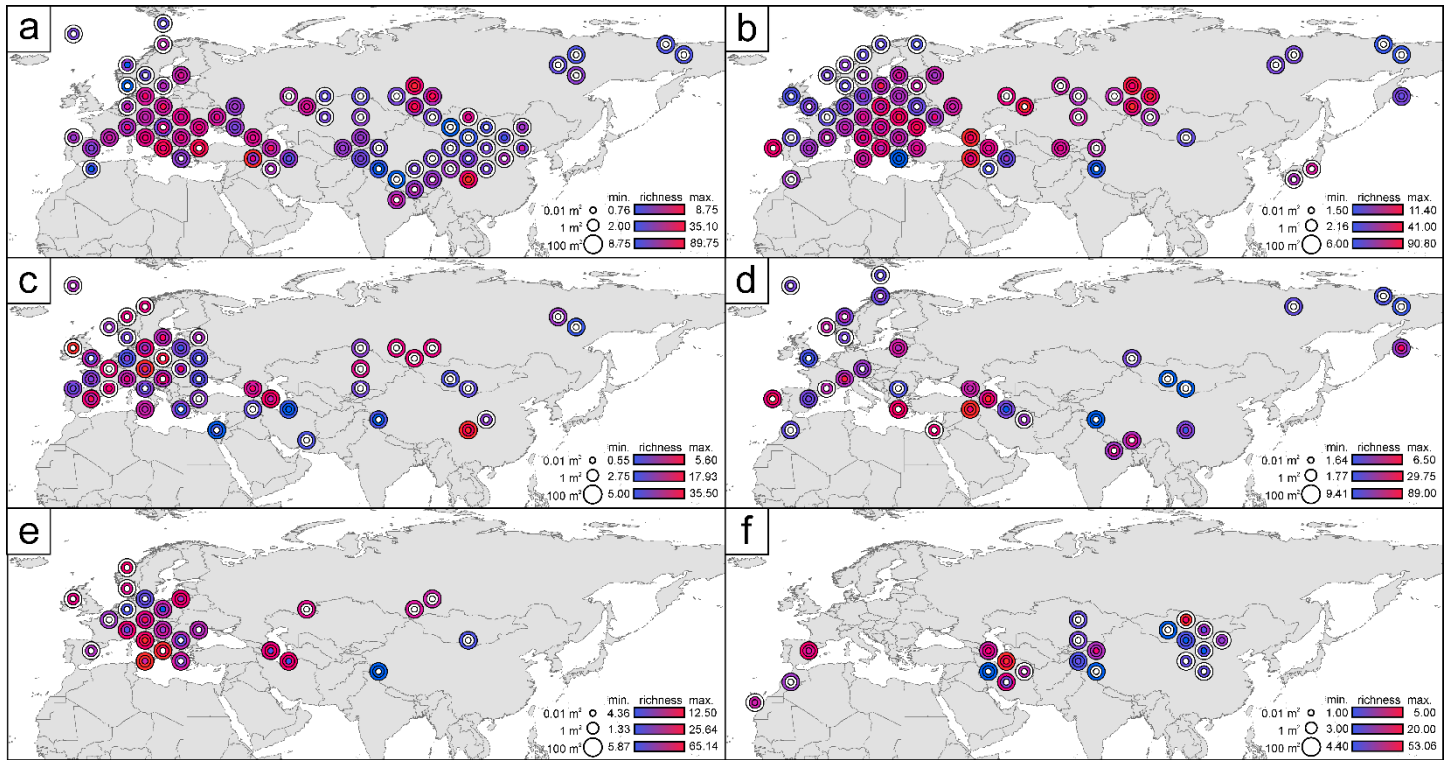


Figure S4.1. Richness hotspots and coldspots of vascular plants across spatial grains in six coarse vegetation types across the Palaeartic realm. Concentric circles represent mean species richness at grain sizes 0.01, 1 and 100 m² within hexagons of ca. 5° x 5°, from the lowest (blue) to the highest (red), while white indicates the absence of data of that grain size. **a** natural grasslands; **b** secondary grasslands; **c** azonal communities; **d** dwarf shrublands; **e** tall forb and ruderal communities; **f** deserts and semi-deserts.

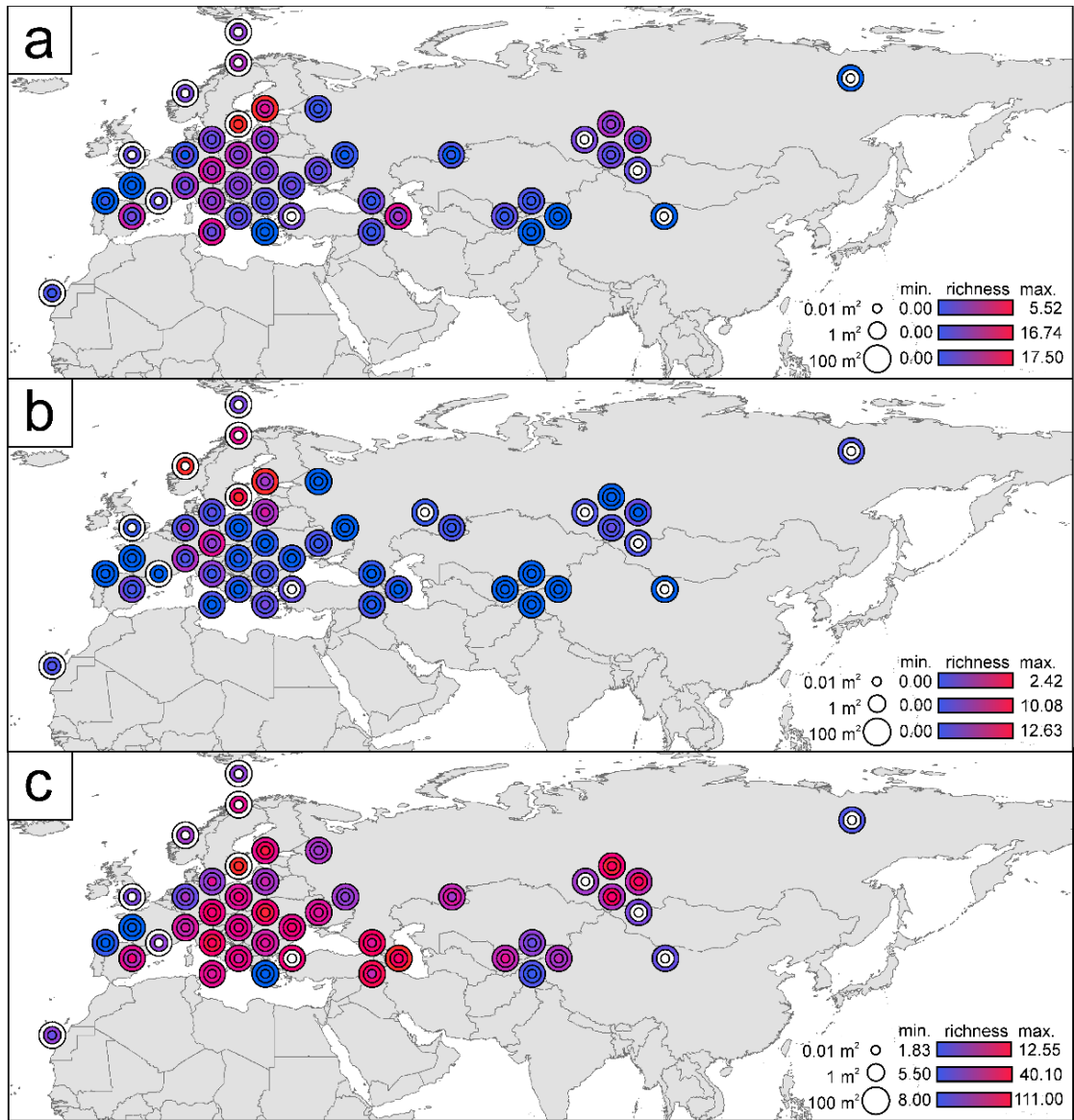


Figure S4.2. Richness hotspots and coldspots for other plant groups across spatial grains in grasslands and other open habitats across the Palearctic realm. Concentric circles represent mean species richness at grain sizes 0.01, 1 and 100 m² within hexagons of ca. 5° x 5°, from the lowest (blue) to the highest (red), while white indicates the absence of data of that grain size. **a** bryophytes; **b** lichens; **c** complete vegetation.

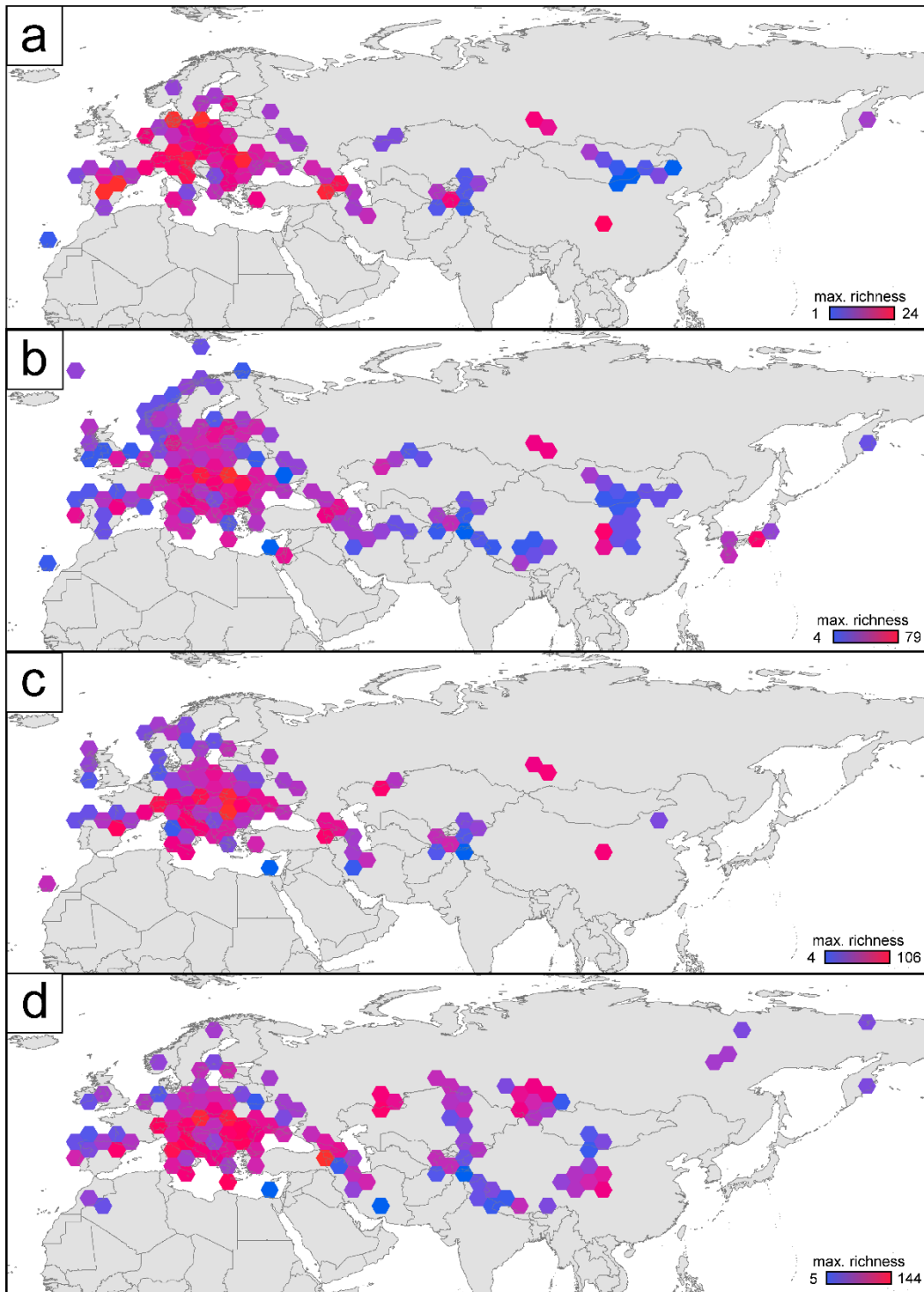


Figure S4.3. Richness hotspots and coldspots of vascular plants across spatial grains in grasslands and other open habitats across the Palearctic realm. Hexagons represent maximum species richness within cells of ca. $3^\circ \times 3^\circ$, from the lowest (blue) to the highest (red). **a** 0.01 m^2 ; **b** 1 m^2 ; **c** 10 m^2 ; **d** 100 m^2 .

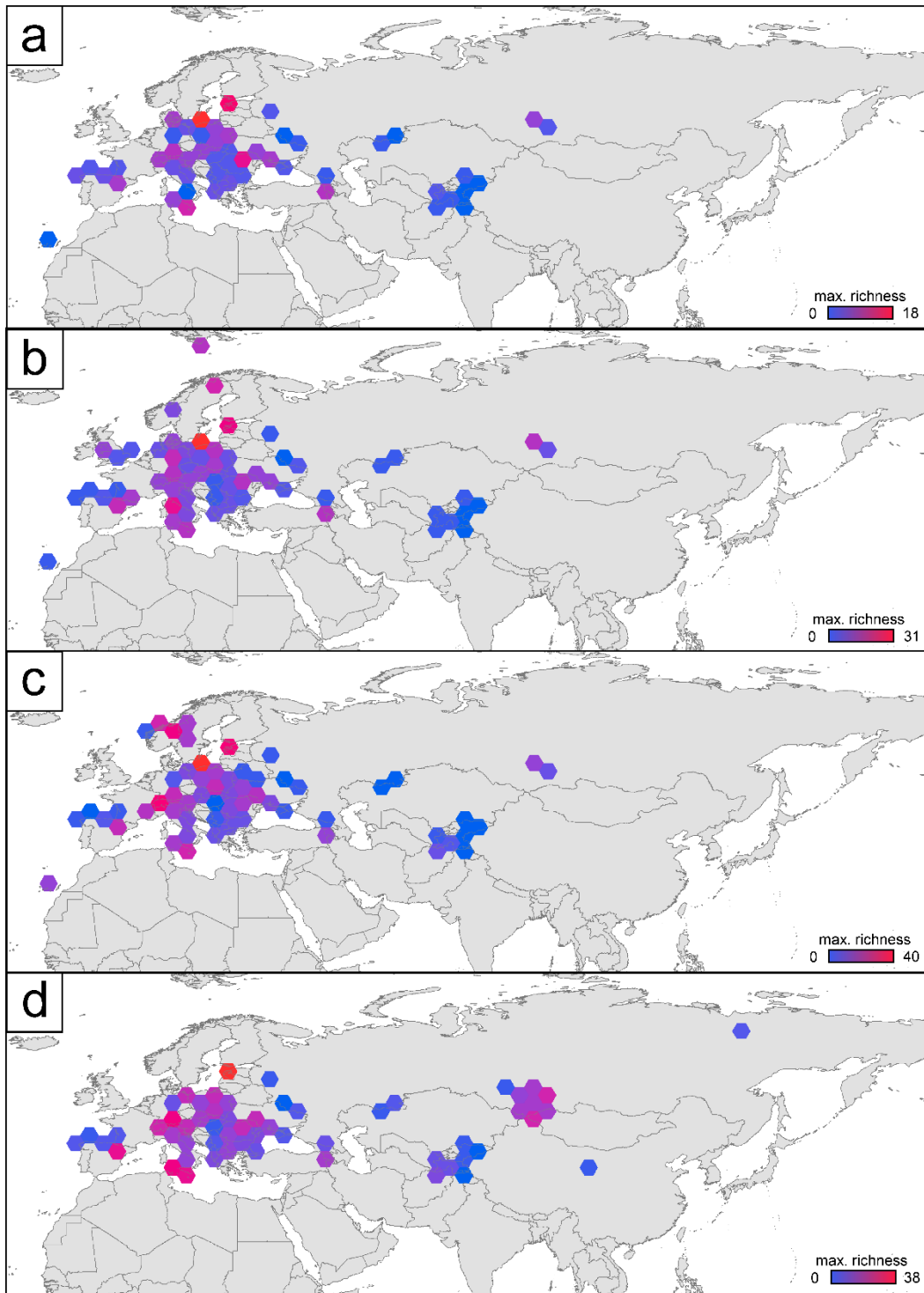


Figure S4.4. Richness hotspots and coldspots of bryophytes across spatial grains in grasslands and other open habitats across the Palearctic realm. Hexagons represent maximum species richness within cells of ca. 3° x 3°, from the lowest (blue) to the highest (red). **a** 0.01 m²; **b** 1 m²; **c** 10 m²; **d** 100 m².

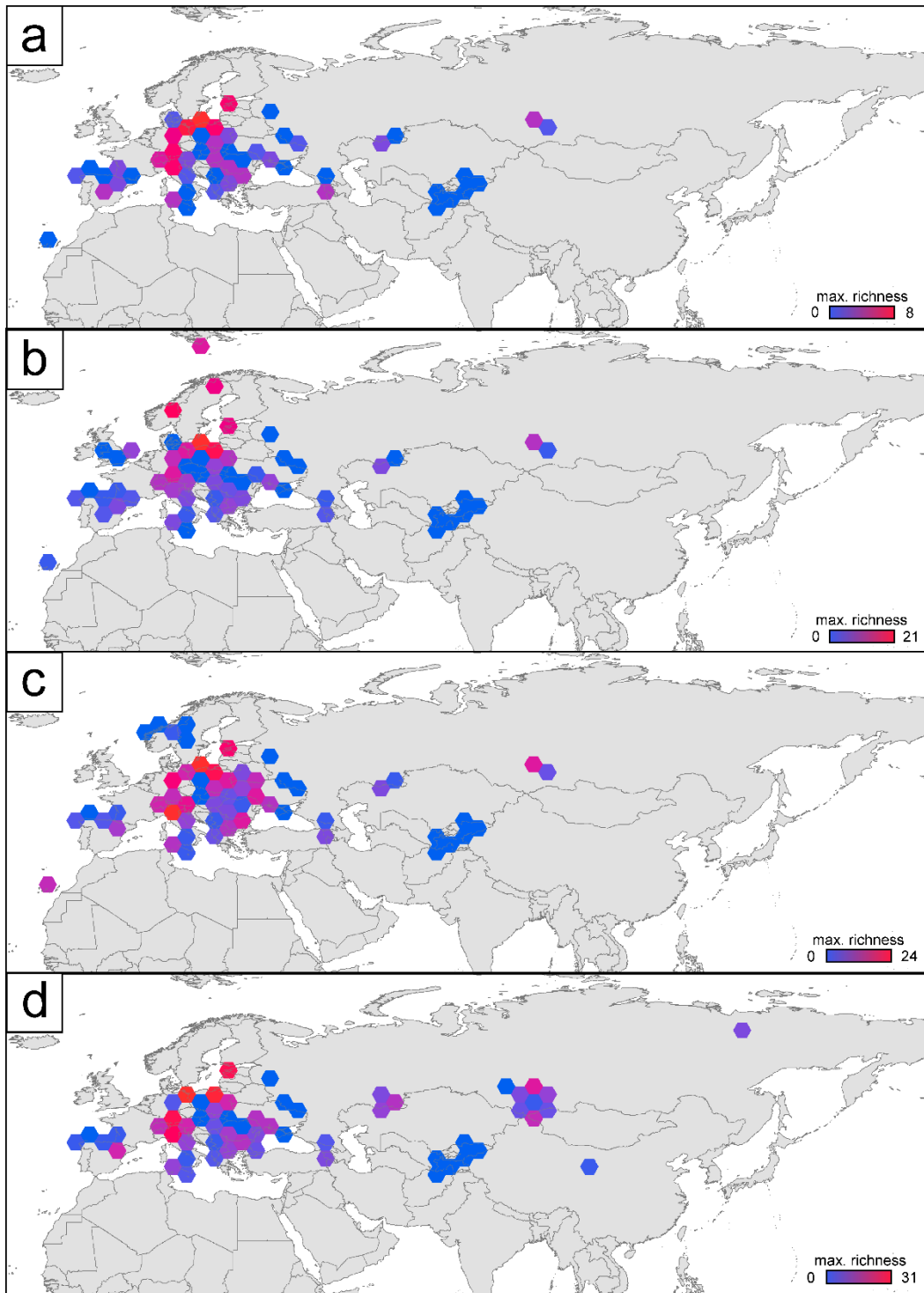


Figure S4.5. Richness hotspots and coldspots of lichens across spatial grains in grasslands and other open habitats across the Palearctic realm. Hexagons represent maximum species richness within cells of ca. 3° x 3°, from the lowest (blue) to the highest (red). **a** 0.01 m²; **b** 1 m²; **c** 10 m²; **d** 100 m².

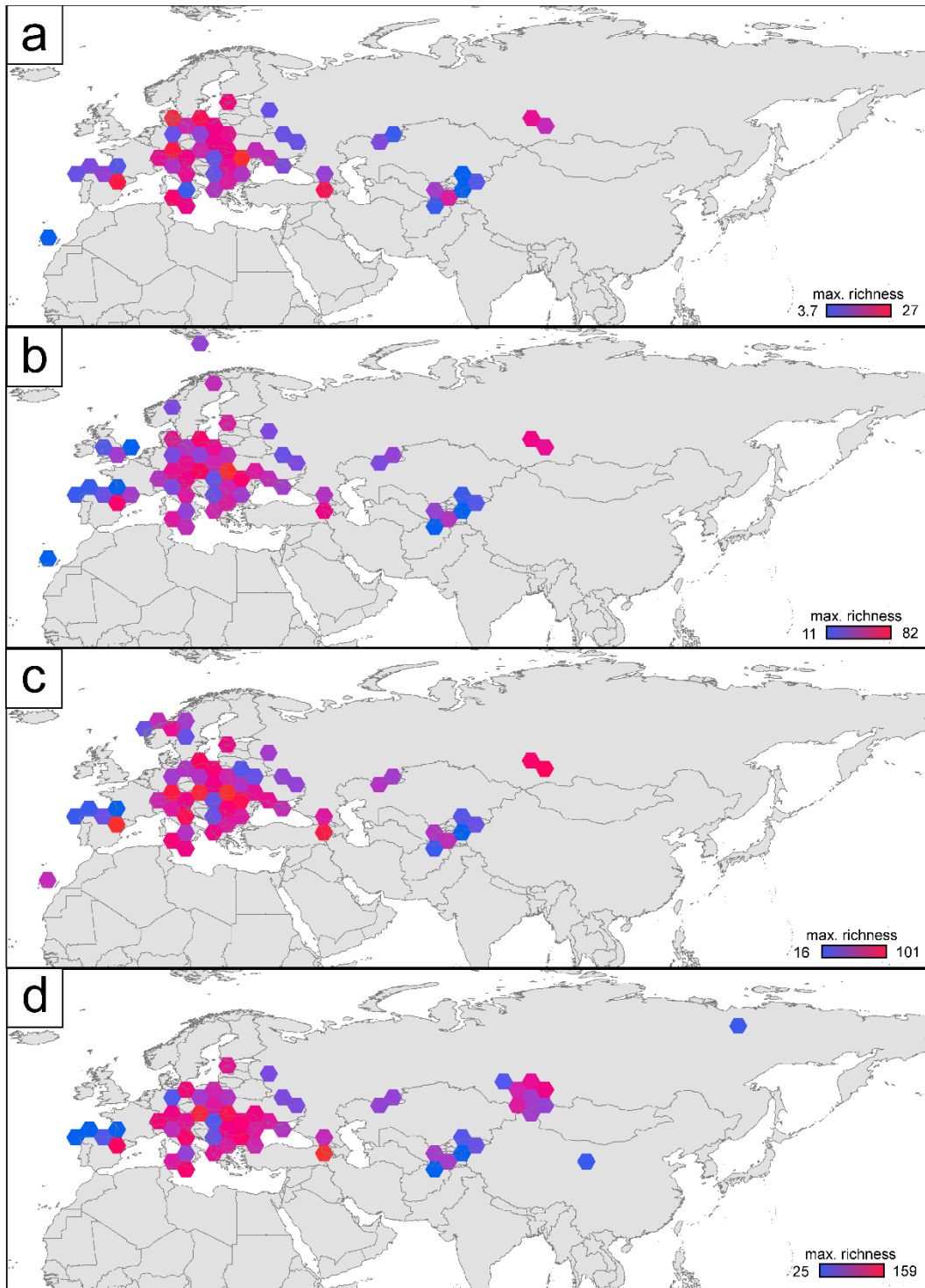


Figure S4.6. Richness hotspots and coldspots of the complete vegetation across spatial grains in grasslands and other open habitats across the Palearctic realm. Hexagons represent maximum species richness within cells of ca. $3^\circ \times 3^\circ$, from the lowest (blue) to the highest (red). **a** 0.01 m^2 ; **b** 1 m^2 ; **c** 10 m^2 ; **d** 100 m^2 .